

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

VIDEOLABS, INC.,
Plaintiff

-v-

**DELL TECHNOLOGIES INC., DELL
INC.,**

Defendants

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W-21-CV-00456-ADA-DTG
Lead case

W-21-CV-00932-ADA-DTG
Member case

CLAIM CONSTRUCTION ORDER AND MEMORANDUM IN SUPPORT THEREOF

Before the Court are the Parties’ claim construction briefs: Defendants Dell Technologies Inc. and Dell Inc.’s (“Dell”) Opening and Reply briefs (ECF Nos. 50 and 62, respectively) and Plaintiff VideoLabs, Inc.’s Response and Sur-Reply briefs (ECF Nos. 60 and 65, respectively). The Court provided preliminary constructions for the disputed terms one day before the hearing. The Court held the *Markman* hearing on April 13, 2023. ECF No. 148. During that hearing, the Court informed the Parties of the final constructions for the disputed terms. *Id.* This Order does not alter any of those constructions.

I. DESCRIPTION OF THE ASSERTED PATENTS

VideoLabs asserts U.S. Patent Nos. 7,769,238, 8,139,878, and 7,970,059. There were no disputed terms for the ’878 Patent. ECF No. 66 at 2–4.

A. U.S. Patent Nos. 7,769,238

The ’238 Patent relates to video encoding / decoding using a form of “variable length coding.” ’238 Patent at 1:19–26. Prior to the ’238 Patent, conventional video encoders performed variable length coding using a single variable length coding (“VLC”) table. *Id.* at 1:19–38. The

'238 Patent discloses using multiple VLC tables, and switching to a particular VLC table depending on how many non-zero coefficients must be encoded (*e.g.*, using one VLC table if between 0 and 2 non-zero coefficients must be encoded and a different VLC table if more than 3 must be encoded, *etc.*). *Id.* at 10:4–53.

B. U.S. Patent Nos. 7,970,059

The '059 Patent describes a type of coding that relies on probability tables. *See* '059 Patent at Abstract. The '059 Patent teaches using a predetermined order of probability tables, such that the encoder (or decoder) proceeds through the tables in that predetermined order without reversing direction. *Id.* at 2:48-51.

II. LEGAL STANDARD

A. General principles

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds*, 575 U.S. 959, 959 (2015) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (internal quotation omitted). The plain-and-ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313.

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain-and-ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). The Federal

Circuit has counseled that “[t]he standards for finding lexicography and disavowal are exacting.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term” and “‘clearly express an intent’ to [define] the term.” *Thorner*, 669 F.3d at 1365.

“Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317. “[D]istinguishing the claimed invention over the prior art, an applicant is indicating what a claim does not cover.” *Spectrum Int’l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379 (Fed. Cir. 1998). The doctrine of prosecution disclaimer precludes a patentee from recapturing a specific meaning that was previously disclaimed during prosecution. *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). “[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable.” *Id.* at 1325–26. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

A construction of “plain and ordinary meaning” may be inadequate when a term has more than one “ordinary” meaning or when reliance on a term’s “ordinary” meaning does not resolve the parties’ dispute. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). In that case, the Court must describe what the plain-and-ordinary meaning is. *Id.*

“Although the specification may aid the court in interpreting the meaning of disputed claim language . . . , particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571

(Fed. Cir. 1988). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony may also be helpful, but an expert’s conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

B. Indefiniteness

“[I]ndefiniteness is a question of law and in effect part of claim construction.” *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application was filed. *Id.* at 911.

In the context of a claim governed by § 112, ¶ 6, the claim is indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable

to recognize the structure in the specification and associate it with the corresponding function in the claim.” *Id.* at 1352. Computer-implemented means-plus-function claims are indefinite unless the specification discloses an algorithm to perform the function associated with the limitation. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012).

C. Means-Plus-Function Claiming

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112 ¶ 6.¹ *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 (Fed. Cir. 2015). In particular, § 112, ¶ 6 provides that a structure may be claimed as a “means . . . for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

The presumption is that terms reciting “means” are subject to § 112, ¶ 6. *Williamson*, 792 F.3d at 1348. But if the term does not use the word “means,” then it is presumed not to be subject to § 112, ¶ 6. *Id.* “That presumption can be overcome, but only if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Samsung Elecs. Am., Inc. v. Prisma Eng’g Corp.*, 948 F.3d 1342 (Fed. Cir. 2020) (internal quotations removed) (citing *Williamson*, 792 F.3d at 1349). “The correct inquiry, when ‘means’ is absent from a limitation, is whether the limitation, read in light of the remaining claim language, specification, prosecution history, and relevant extrinsic evidence, has sufficiently definite structure to a person of ordinary skill in the art.” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), *overruled on other grounds by Williamson*, 792 F.3d at 1349.

¹The American Invents Act of 2011 changed the numbering of the relevant subsection from § 112, ¶ 6 to § 112(f). Because the substance of the subsection did not change, the undersigned will refer to the relevant subsection as § 112, ¶ 6 in keeping with the numeration at the time of the patent filing.

When § 112 ¶ 6 applies, it limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation involves multiple steps. “The first step . . . is a determination of the function of the means-plus-function limitation.” *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). “[T]he next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* A “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* The focus of the “corresponding structure” inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112, ¶ 6 does not permit “incorporation of structure from the written description beyond that necessary to perform the claimed function.” *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112, ¶ 6 limitations implemented by a programmed general-purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function, *i.e.*, the corresponding structure is a processor + algorithm. *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). In this situation, the corresponding structure is not a general-purpose computer but rather the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). The algorithm may be described in “any

understandable terms,” such as “as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013). Federal Circuit caselaw does not require that the patent describe an algorithm “if the selection of the algorithm or group of algorithms needed to perform the function in question would be readily apparent to a person of skill in the art.” *Aristocrat Techs. Australia Pty Ltd. v. Multimedia Games, Inc.*, 266 F. App’x 942, 947-48 (Fed. Cir. 2008).

Finally, § 112, ¶ 6 does not apply when the claim itself describes the algorithm. *St. Isidore Rsch., LLC v. Comerica Inc.*, No. 2:15-CV-1390-JRG-RSP, 2016 WL 4988246, at *13 (E.D. Tex. Sept. 19, 2016).

III. LEGAL ANALYSIS

A. Term #1: “a unit configured to obtain the residual block image of the current block by performing inverse quantization and inverse orthogonal transformation on the coefficients corresponding to the residual block image of the current block”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
#1: “a unit configured to obtain the residual block image of the current block by performing inverse quantization and inverse orthogonal transformation on the coefficients corresponding to the residual block image of the current block” U.S. Patent No. 7,769,238, Claim 1 Proposed by Dell	No construction necessary Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are inverse quantizing unit 1405 and inverse orthogonal transforming unit 1406, and equivalents thereof	This term is subject to 35 U.S.C. § 112, ¶ 6. Function: obtain the residual block image of the current block by performing inverse quantization and inverse orthogonal transformation on the coefficients corresponding to the residual block image of the current block Structure: Indefinite

The Parties’ Positions Regarding Whether the Term is Subject to 35 U.S.C. § 112, ¶ 6:

Dell contends that the claim language “recites the nonce word ‘unit’ without providing structure in the claim.” Opening at 17. Dell contends that the claim language fails to recite “any” structure, let alone “sufficiently definite structure” for “unit.” *Id.* Dell contends that the Federal Circuit acknowledges words like “unit” “may be used in a claim in a manner that is tantamount to using the word ‘means[.]’” *Id.* Dell contends that courts “regularly” find that claim terms that use the word “unit,” even when modified by an adjective, *e.g.*, “spectral shaping unit,” are subject to § 112, ¶ 6. *Id.* at 17–18 (citing cases). Dell contends that, by contrast in this case, there are no modifiers before “unit.” *Id.* at 18.

In its response, VideoLabs contends that because the claim term does not use the word “means,” § 112, ¶ 6 does not apply. Response at 5. VideoLabs contends that § 112, ¶ 6 does not apply because POSITA would understand the term to refer to known structure. *Id.* More specifically, VideoLabs contends that “[i]nverse quantization and inverse orthogonal transformation were well-known functions of video decoders at the time of the invention and the disputed claim language refers to a known part of a video decoder for performing those functions.” *Id.*

VideoLabs contends that Dell never identifies what constitutes a POSITA or discuss how a POSITA would understand this term. *Id.* As such, VideoLabs contends that Dell cannot overcome the presumption that § 112, ¶ 6 does not apply. *Id.* at 5–6.

VideoLabs contends that Dell effectively seeks a “hardline rule that § 112, ¶ 6 automatically applies when a term includes the word ‘unit.’” *Id.* at 6.

VideoLabs contends that a POSITA would understand, from the claims and specification, that the disputed term “refers to a portion of a video decoder, a known structure at the time of the invention.” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶ 45). VideoLabs contends

that extrinsic evidence demonstrates that a video decoder is hardware and/or software for performing known decoding functions, which include inverse quantization and inverse orthogonal transformation. *Id.* at 7 (citing Response, Ex. 1 (Richardson declaration) at ¶ 45). VideoLabs contends that the patent confirms this understanding as much of the specification concerns decoding functionality. *Id.* (citing '238 Patent at 1:1–15, 1:19, 1:33–37; Response, Ex. 1 (Richardson declaration) at ¶ 45)

VideoLabs contends that the claim language confirms that “the disputed term is a structure within the decoder for performing specific decoding functionality.” *Id.* For example, VideoLabs contends that Claim 1 recites that the claim term is part of the block decoding unit, which is part of the picture decoding unit, which decodes the separate coded picture data. *Id.* at 7–8 (Response, Ex. 1 (Richardson declaration) at ¶¶ 45, 46).

VideoLabs contends that a POSITA would understand that this “disputed term is hardware and/or software of the picture decoding unit for performing inverse quantization and inverse orthogonal transformation.” *Id.* at 8. VideoLabs contends that because that “inverse quantization and inverse orthogonal transformation on block images were well-known functions of video decoders at the time of the invention,” then the “disputed claim term necessarily connotes structure within a decoder to a POSITA.” *Id.* (Response, Ex. 1 (Richardson declaration) at ¶¶ 44–47). VideoLabs contends that a POSITA “would therefore understand that the disputed claim term is a well-recognized structural element (hardware and/or software) of a decoder that obtains a specific output (a residual block image) given a specific input (coefficients) by using a specific process (performing inverse quantization and inverse orthogonal transformation).” *Id.* (citing '238 Patent at 38:38–42; Response, Ex. 1 (Richardson declaration) at ¶¶ 47–48). Based on this understanding, VideoLabs contends that § 112, ¶ 6 does not apply. *Id.*

VideoLabs contends that § 112, ¶ 6 also does not apply because the “claim term specifies an objective and explains how hardware/software operates within the context of the claimed invention to achieve it.” *Id.* at 9. More specifically, VideoLabs contends that the objective is to obtain residual block image from coefficients and that operations are to

(1) begin with a specific input (coefficients) and (2) obtain a specific output (a residual block image) using (3) a specific process (performing inverse quantization and inverse orthogonal transformation). The residual block image obtained thereby is then used to “reproduce a block image,” which means to reproduce an unencoded image.

Id. at 10 (citing ’238 Patent at 38:44–47; Response, Ex. 1 (Richardson declaration) at ¶ 48).

In its reply, Dell contends that the Federal Circuit has consistently held that claim terms drafted in the form “unit configured to...” invokes § 112, ¶ 6, and VideoLabs does not cite a case to the contrary. Reply at 9.

Dell contends that VideoLabs’s expert’s declaration further proves Dell’s point. *Id.* at 10. More specifically, Dell points to VideoLabs’s expert’s opinion that “this term refers to ... hardware and/or software.” *Id.* Dell contends that the “and/or” “fudge phrase” is next to meaningless, and is far from “sufficiently definite” structure given that hardware and software are incredibly broad. *Id.* at 11. Dell contends that VideoLabs’s expert does not “does not provide a *single example* of hardware or software that performs inverse quantization and inverse orthogonal transformation” or point to any specific hardware and/or software in the MPEG-4 video coding standard. *Id.* (emphasis in Dell’s brief). Dell contends that VideoLabs “in essence, contends that because the functions of inverse quantization and inverse orthogonal transformation were well known in the art, the recitation of those functions convey sufficient structure,” but that the Federal Circuit rejected this exact argument in *Williamson*. *Id.* (citing *Williamson*, 792 F.3d at 1351).

Dell contends that VideoLabs’s argument that “the nature of the placement of this particular functional language in the claims somehow provides structure” is also contrary to law. *Id.* More specifically, Dell contends that VideoLabs does not “cite a single Federal Circuit opinion holding that the structure of entirely separate limitations can imbue structure to a nonce term. In fact, the Federal Circuit rejected such an analysis in *Williamson*.” *Id.* at 12 (citing *Williamson*, 792 F.3d at 1351).

Dell contends that the Federal Circuit has also rejected the argument that the claim language’s description of the disputed term having a specific location (*e.g.*, that the “picture decoding unit” is coupled to a synchronous bus and exchanged information with other units in the claim). *Id.* (citing *Diebold Nixdorf, Inc. v. U.S. Int’l Trade Comm’n*, 899 F.3d 1291, 1301 (Fed. Cir. 2018)).

In its sur-reply, VideoLabs first contends that “[Dell] fail[s] to identify a POSITA and further fail to provide any evidence that a POSITA would not understand that this term connotes structure.” Sur-Reply at 1. VideoLabs contends that without any evidentiary showing, Dell cannot overcome the presumption that § 112, ¶ 6 does not apply. *Id.* at 1–2 (citing cases). VideoLabs contends that “there is no discussion of the broader term at issue, no discussion of the claims, no citation to the intrinsic record, and no citation to or discussion of any extrinsic evidence of known structures in the field of video encoding and decoding,” in Dell’s brief. *Id.* at 2.

VideoLabs contends that it provided un rebutted evidence demonstrating that the term connotes known structure to a POSITA. *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶ 45). VideoLabs contends that the following facts are un rebutted:

- (1) the ’238 patent concerns improvements of video coding techniques implemented by video encoders and decoders; (2) video encoders and decoders were well-known structures at the time of the invention that included hardware and/or software that performed video processing; (3) inverse quantization and

inverse orthogonal transformation were well-known at the time of the invention and performed by video decoders; and (4) a POSITA would understand that this term connotes the hardware and/or software of a video decoder that generates a residual block image using inverse quantization and inverse orthogonal transformation.

Id. (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 43–47). VideoLabs contends that these un rebutted facts prevent Dell from overcoming the presumption that § 112, ¶ 6 does not apply. *Id.*

VideoLabs contends that Dell does not dispute that the claim itself describes the objectives and operations of the term. *Id.* at 3.

VideoLabs contends that its expert is not the only POSITA who opined that this term connoted sufficiently definite and known structure. *Id.* More specifically, VideoLabs contends that an “unaffiliated expert in a previous IPR petition (who was challenging the patent) testified that ‘each of the ‘unit’ terms that appear in claim 1 of the ’238 patent describes a sufficiently definite and known structure to a POSITA.” *Id.* VideoLabs contends that Dell, in its own IPR petition, argued that “[a] POSITA would have understood that ‘Transform’ and ‘Quantizer’ units exist in a decoder of H.263.” *Id.*

With respect to Dell’s argument that the nature of the placement of this particular functional language in the claims does not provide structure, VideoLabs contends that Dell ignores the claim language. *Id.* at 4. Furthermore, VideoLabs contends that “[Dell’s] reliance on *Williamson* misses the mark, as the fundamental holding in *Williamson* was that there was insufficient evidence that the ‘distributed learning control server’ was a known structure in the art or that the term signified a known structure within a known device.” *Id.* (citing *Williamson*, 792 F.3d at 1350–51). By contrast, VideoLabs contends that “numerous cases show that known hardware and/or software in a known device connotes structure.” *Id.* at 4–5.

With respect to Dell’s argument that the claimed “picture decoding unit” is “generic ‘hardware and/or software,’” VideoLabs contends that Dell offers “no analysis, citation, or opinion

of a POSITA for this conclusion,” while, by contrast, VideoLabs provides an expert declaration and dictionary definitions that a picture decoding unit was known and defined structure to a POSITA at the time of the invention. *Id.* at 5 (citing Response, Ex. 1 (Richardson declaration) at ¶ 45).

With respect to Dell’s argument that hardware and software very broad terms, VideoLabs contends that its expert did “not testify that the term connotes *any* hardware or software; his testimony is clear: the term connotes ‘hardware and/or software *of a video decoder* that generates a residual block image using inverse quantization and inverse orthogonal transformation.’” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶ 43) (emphasis in VideoLabs’ brief).

More generally, with respect to Dell’s argument that the identified structure is “too broad,” VideoLabs contends that the proper test is whether a POSITA would understand that the term connotes structure. *Id.* at 5–6. VideoLabs contends that “the connoted structure that [VideoLabs’s expert] identified is remarkably similar to connoted structures of other recent cases, demonstrating that the specific ‘hardware/software’ connotation is not overbroad.” *Id.* at 6.

The Court’s Analysis:

After reviewing the parties’ arguments and considering the applicable law, the Court agrees with VideoLabs that the term is not subject to § 112, ¶ 6 for the reasons that follow. **First**, because the term does not contain the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348.

Second, the Court agrees with Plaintiff that a POSITA would understand that the claim term refers aspects of a video decoder, which was a known structure at the time of the invention. *Apple*, 757 F.3d at 1299, *rev’d on other grounds by Williamson*, 792 F.3d 1339 (“A limitation has

sufficient structure when it recites a claim term with a structural definition that is either provided in the specification or generally known in the art.”). More specifically, the claim term refers to “performing inverse quantization and inverse orthogonal transformation,” which a POSITA would understand to refer to a known computing structure within a video decoder that performs the known decoding functions of inverse quantization and inverse orthogonal transformation. Response, Ex. 1 (Richardson declaration) at ¶ 47 (describing that inverse quantization and inverse orthogonal transformation were well-known video decoding structures, *e.g.*, were described in the MPEG-4 Part 2 standard).

By contrast, Dell does not identify a POSITA, let alone provide an argument that a POSITA would not understand that the claim term connotes structure.

Third, the Court agrees with Plaintiff that the claim itself describe the objectives and operations of the term. *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319–21 (Fed. Cir. 2004). Here, the claim term describes that the objective is to obtain residual block image from coefficients. The claim term further describes that the operations are to (1) begin with a specific input (coefficients) and (2) obtain a specific output (a residual block image) using (3) a specific process (performing inverse quantization and inverse orthogonal transformation). The Court notes that Dell does not appear to provide a counter-argument against this point.

Fourth, an unaffiliated expert who provided a declaration in support of petitioner in a previous IPR petition testified that ‘each of the ‘unit’ terms that appear in claim 1 of the ’238 patent describes a sufficiently definite and known structure to a POSITA.’” *Huawei Device Co., Ltd. v. Optis Wireless Tech., LLC*, IPR2018-00658, Paper 1008 at ¶ 261. Similarly, Dell also argued that “[a] POSITA would have understood that ‘Transform’ and ‘Quantizer’ units exist in a decoder of

H.263” in its own IPR petition. *Dell Techs. Inc. v. VideoLabs, Inc.*, IPR2022-00628, Paper 1 at 49-50 (March 2, 2022).

Construction: Because the “heavy presumption” is that terms should be construed according to their plain-and-ordinary meaning and because Dell does not allege lexicography or disclaimer, which are the only two exceptions to the general rule that a term should be construed as having its plain-and-ordinary meaning, the Court concludes that the term should be construed as having its plain-and-ordinary meaning. *Azure Networks*, 771 F.3d at 1347; *Thorner*, 669 F.3d at 1365.

Therefore, for the reasons described above, the Court finds that the term is not subject to § 112, ¶ 6 and should be construed according to its plain-and-ordinary meaning.

B. Term #2: “probability table”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
#2: “probability table” U.S. Patent No. 7,970,059, Claims 1–4 Proposed by Dell	No construction necessary	“numbered table containing a probability with which ‘0’ occurs and/or a probability with which ‘1’ occurs”

The Parties’ Positions:

Dell contends that a “probability table” must (1) be numbered (such that probability tables can be switched between “in a predetermined one direction”); and (2) contain a probability with which ‘0’ occurs and/or a probability with which ‘1’ occurs. Opening at 12. Dell contends that these features are “absolutely necessary” for the claimed invention to function. *Id.* Dell contends

that without adopting their proposed construction, a jury might conclude that probability table that did not include these features might fall within the scope of this term, even if that probability rendered the claims inoperable. *Id.*

Dell contends that their proposed construction is consistent with the claims, specification, and prosecution history. *Id.* at 13. With respect to the claims, Dell contends that because the claims “define the directionality of switching,” the probability tables must be numbered. *Id.* Dell contends that the specification “emphasizes that ‘the probability tables are switched in one direction, that is, from a probability table with a smaller **table number** to a probability table with a larger **table number**.’” *Id.* (quoting ’059 Patent at 6:50–52 (emphasis in Dell’s brief). Dell contends that Applicant’s arguments to distinguish a prior art reference “confirm[] that ‘direction’ in the ’059 patent refers to table numbers.” *Id.*

Dell contends that the probability table must contain “a probability with which ‘0’ occurs and/or a probability with which ‘1’ occurs” is required because the data to be arithmetically coded is binary data. *Id.* (citing ’059 Patent at 5:58–61). Dell contends that the examples in the specification that must contain probabilities where a “0” or “1” could occur. *Id.* (citing ’059 Patent at 6:62–7:7).

Dell contends that every example of a probability table in the specification includes the two features required in Dell’s proposed construction. *Id.* at 14–15 (citing ’059 Patent, 4:8–10, Figure 8, 6:60–62, 6:63–67, 7:8–11, 1:57–59, Figure 2, 6:15–16, Figure 7, 6:50–52, 8:34–36, Figure 9).

In its response, VideoLabs contends that Dell’s proposed construction is inconsistent with the plain-and-ordinary meaning of this term and that it simply paraphrases and rewrites the claim term. Response at 12.

VideoLabs contends that Dell’s proposed construction improperly limits the term the embodiments disclosed in the specification. *Id.* VideoLabs contends that this is improper because the patentees did not limit the scope of the term by lexicography or disclaimer. *Id.*

VideoLabs contends that the constituent words “probability” and “table” are well-understood and that the combination of those words “has no specialized meaning in the art that requires construction.” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶ 51). VideoLabs contends that “[t]here is no inherent meaning within the phrase or its constituent terms that would lead to the requirement that a probability table be (1) ‘numbered’ or (2) contain a specific type of probability value, as proposed by [Dell’s] construction.” *Id.* at 12–13. Rather, VideoLabs contends that probability tables known in the art at the time were not limited by those two features. *Id.* at 13 (citing Response, Ex. 1 (Richardson declaration) at ¶ 59).

VideoLabs contends that Dell makes three incorrect arguments about their construction. *Id.* First, VideoLabs contends that Dell’s argument that the term should be construed to aid the jury is a strawman and that the real purpose is to “buttress their other flawed directional switching construction.” *Id.* VideoLabs contends that Dell’s proposed construction does “nothing” to assist the jury as it uses the very words of the claim term. *Id.*

VideoLabs contends that there is no requirement that probability tables must be assigned a number in order to switch in a predetermined direction; for example, the probability tables could be assigned a letter or another label. *Id.* at 13–14. VideoLabs contends that there is no “absolute requirement in the claim or the specification that the values in the probability table have the exact syntax of ‘the probability with which ‘0’ occurs and/or a probability with which ‘1’ occurs..’”

Id. at 14 (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 57–62).

Second, with respect to Dell’s argument that their proposed construction is “consistent” with embodiments in the specification, VideoLabs contends that “nothing in the specification warrants limiting the claims to these embodiments.” *Id.* VideoLabs contends that limiting a claim term to the disclosed embodiments is improper. *Id.* (quoting *Evolusion Concepts, Inc. v. HOC Events, Inc.*, 22 F.4th 1361 (Fed. Cir. 2022)).

With respect to Dell’s argument that its proposed construction is necessary to ensure that the claimed “arithmetic coding” on “a first bit of the binary data” is possible, VideoLabs contends that “there is no inherent requirement that a probability table contain information in this type of format.” *Id.* at 15 (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 56–62).

Third, with respect to Dell’s prosecution history arguments, VideoLabs contends that Applicant distinguished the prior art reference because “it switched tables in *multiple directions*—not because the tables were not “numbered.” *Id.* at 16 (emphasis in VideoLabs’ brief). VideoLabs contends that the prosecution history “falls far short of the ‘exacting’ standard to find claim scope disavowal.” *Id.* (citing *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014)).

In its reply, Dell contends that their proposed construction is entirely consistent with the intrinsic evidence and that every description of “probability table” in the specification contains the two features described in Dell’s proposed construction. Reply at 6. Dell contends that, by contrast, VideoLabs’s proposed construction improperly relies on extrinsic evidence in order to expand the scope of the claims. *Id.* Dell contends that under VideoLabs’s proposed construction, a “probability table” does not need to be a table or contain a probability. *Id.*

With respect to VideoLabs’s argument that Dell’s proposed construction improperly limits the claim scope to the disclosed embodiments, Dell contends that the “Federal Circuit has

repeatedly made clear that where every embodiment disclosed in a specification includes certain features, the claims should be construed accordingly.” *Id.* (citing *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1149 (Fed. Cir. 2012)).

With respect to VideoLabs’s argument that the constituent words are well-understood, Dell contends that the Federal Circuit “instructed in *Phillips* that claim terms must be construed *in the context of the specification*...[and that] the intrinsic evidence makes clear that the two requirements provided by Dell’s construction are necessary for the claimed invention to function.” *Id.* at 7 (citing *Phillips*, 415 F.3d at 1313). Dell contends that VideoLabs, by contrast, relies on extrinsic evidence in order to argue that “probability tables” in the art were not limited by the features in Dell’s proposed construction. *Id.*

Dell contends that the “probability tables” that VideoLabs points to in the art are not actually probability tables. *Id.* Dell contends that simply because extrinsic evidence uses the words “probabilities” or “probability estimates” does not mean that they are “probability tables.” *Id.* In particular, Dell contends that one of the examples VideoLabs’s expert cites to (which describes probabilities for five motion vector values (-2, -1, 0, 1, 2)) cannot be the claimed “probability table” because it includes probabilities that are not binary values, *i.e.*, -2, -1, and 2. *Id.* at 7–8.

Dell contends that VideoLabs cannot point to any embodiment that a “probability” table contains features described in VideoLabs’s cited extrinsic evidence. *Id.* at 8. With respect to VideoLabs’s argument that “there is no inherent requirement” that a probability table contain “a probability with which ‘0’ occurs and/or a probability with which ‘1’ occurs,” Dell contends that VideoLabs does not identify any disclosure in the specification that supports that argument. *Id.*

With respect to the prosecution history, Dell contends that Applicant distinguished the prior art reference based on the fact that it “switched between context in both directions *based on table numbers*.” *Id.* (emphasis in Dell’s brief).

In its sur-reply, VideoLabs contends that Dell improperly attempts to import limitations from the specification into the construction. Sur-Reply at 6–7. VideoLabs contends that because Dell does not point to any lexicography or disclaimer, no construction is necessary. *Id.* at 7.

With respect to Dell’s argument that every embodiment includes the features listed in Dell’s proposed construction, VideoLabs contends that it is still improper to import those features into the construction. *Id.* (citing *Evolusion*, 22 F.4th at 1361). VideoLabs also contends that *In re Abbott* is inapposite because the court did not import limitations from the embodiments because they were present in every embodiment, but rather because the specification disparaged a construction without those limitations and the claims suggested including those limitations. *Id.* (citing 696 F.3d at 1149). VideoLabs contends that, in this case, the specification does not disparage a construction without those limitations, and nothing in the claims prohibit other types of probability tables. *Id.*

VideoLabs contends that Dell does not provide any rebuttal testimony. *Id.* VideoLabs contends that Dell appears to contend that the probability tables in the art that VideoLabs’s expert references are not “probability tables” because they do not use the specific phrase “probability tables.” *Id.* VideoLabs contends that misses the mark because “the words ‘probability’ and ‘table’ are well understood, and their combination as a phrase has no specialized meaning in the art,” but more important that the concept of a “probability table” was well-known to a POSITA and used in the art. *Id.* at 8.

With respect to Dell’s argument that VideoLabs did not provide a single example where probability tables are not numbered, VideoLabs contends that Dell is mistaken as VideoLabs pointed to the H.263 standard which uses a mixture of numbered and non-numbered tables. *Id.*

With respect to Dell’s argument that because other portions of the claim require coding binary data, the probability tables must also be limited to binary data, VideoLabs contends that Dell is legally and technically incorrect. *Id.* VideoLabs contends that Dell is legally incorrect because “even if [Dell was] correct that other limitations required this term to be limited it would be improper to construe this term to include the same limitations, as it would render the distinct limitations superfluous.” *Id.* (citing *Digital–Vending Servs. Int’l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012)). VideoLabs contends that Dell is technically incorrect because “even in the case of binary arithmetic encoding of a single binary digit or “bin,” a POSITA would have recognized it is not necessary for a probability table to record or store probability with which ‘0’ occurs (i.e., $p(0)$) and/or a probability with which ‘1’ occurs (i.e., $p(1)$).” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 58-61). VideoLabs contends that, by contrast, all that is needed is if $p(0)$ and $p(1)$ can be “derived” from the probability table. *Id.* at 8–9.

With respect to Dell’s argument that VideoLabs cannot point to any embodiment that a “probability” table contains features described in VideoLabs’s cited extrinsic evidence, VideoLabs contends that it is not arguing to include those features, but rather that those features would be excluded by Dell’s proposed construction. *Id.* at 9.

VideoLabs contends that Dell provides no evidence to counter its expert’s opinions and evidence that there is no inherent requirement that a probability table be numbered or contain probabilities whether a 0 or 1 occurs. *Id.* With respect to Dell’s argument that the specification does not support a broad interpretation of “probability table,” VideoLabs contends that “[a]ll

embodiments of the specification are within the scope of VideoLabs’s plain meaning construction, i.e., they are all tables that include probability information (in this context, probability information for data to be encoded or decoded).” *Id.*

With respect to the prosecution history, VideoLabs contends that the prior application used different claim language and that Applicant’s argument was directed towards switching in multiple directions versus in one direction, and not whether the probability table was numbered. *Id.* at 10.

The Court’s Analysis:

After reviewing the parties’ arguments and considering the applicable law, the Court agrees with VideoLabs that this term should be construed according to its plain-and-ordinary meaning for the reasons that follow. **First**, the “heavy presumption” is that terms should be construed according to their plain-and-ordinary meaning. *Azure Networks*, 771 F.3d at 1347. **Second**, Dell does not expressly allege lexicography or disclaimer, which are the only two exceptions to the general rule that a term should be construed as having its plain-and-ordinary meaning. **Thorner**, 669 F.3d at 1365.

Third, the term “probability table” has a known meaning in the art at the time of the invention; namely, it is a table of probabilities. Response, Ex. 1 (Richardson Declaration) at ¶ 52. Even Dell’s proposed construction describes that it is a table of probabilities (although Dell’s proposed construction adds additional limitations). Furthermore, the constituent words “probability” and “table” are also well-understood. *Id.* at ¶ 51.

The plain meaning of “probability,” “table,” and “probability table” do not require that a probability table be (1) numbered or (2) contain a specific type of probability value. With respect to the former, table numbers are not necessarily required in order to determine which table will be

used next. By contrast, the claimed probability tables could be assigned a non-numeric label, *e.g.*, a letter, such that probability tables can be switched between “in a predetermined one direction,” *e.g.*, A to B to C to D.

With respect to the latter, the Court agrees with VideoLabs that the claims and specification do not require that the probability table contain a probability with which “0” occurs and/or a probability with which “1” occurs. Furthermore, it is not necessarily required that the probability table contain probabilities for which “0” and “1” occur; rather, those probabilities could be derived. That said, the Court concludes that for a table to be a “probability table,” it must contain at least one probability, and where other probabilities may be derived from that one probability.

Fourth, Dell’s proposed construction improperly limits the term the embodiments disclosed in the specification. *Liebel-Flarsheim*, 358 F.3d at 913 (“[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.”).

Dell ignores case law on this point and cites *In re Abbott* for the proposition that it is “clear Federal Circuit law that the uniform disclosure of every single embodiment is compelling evidence that the claims should be construed accordingly.” 696 F.3d at 1149. But the Federal Circuit in that case did not hold that the claim term was limited to scope of the disclosed embodiments, but rather it narrowed the scope of the claim term because a broader construction was “unreasonable and inconsistent with the language of the claims and the specification.” *Id.* at 1148–49.

Fifth, with respect to the prosecution history, the Court agrees with Plaintiff that the point of distinction between the pending claim and the prior art reference was that the prior art switched contexts in multiple directions and not in just one direction as in the claimed invention. Opening,

Ex. 3 at 9 (“In other words, in Karczewicz, while the contexts are switched in one direction for a single coefficient within a given block, when switching contexts between coefficients within the given block, the switching occurs in both directions.”) (emphasis in original). At minimum, this is a reasonable interpretation that prevents the Court from concluding that Applicant made a clear and unmistakable disclaimer. *3M*, 725 F.3d at 1326 (“when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.”).

Sixth, the Court does not believe that Dell’s proposed construction gives a jury the guidance necessary to apply the construction. *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004) (“The district court simply must give the jury guidance that can be understood and given effect by the jury once it resolves the issues of fact which are in dispute.”). Rather, it paraphrases the claim term by using the same words. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”).

Therefore, for the reasons described above, the Court finds that the term should be construed according to its plain-and-ordinary meaning, wherein the plain-and-ordinary meaning is a “table of at least one probability that is not merely data from which probabilities can be derived”

C. Term #3: “audio coding unit configured to code an audio signal”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
#3: “audio coding unit configured to code an audio signal”	No construction necessary Alternatively, if found to be subject to 35 U.S.C. § 112, ¶	This term is subject to 35 U.S.C. § 112, ¶ 6.

U.S. Patent No. 7,970,059, Claims 1–4 Proposed by Dell	6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase is voice processing unit (ex305) and equivalents thereof.	Function: code an audio signal Structure: Indefinite
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The Parties’ Positions Regarding Whether the Term is Subject to 35 U.S.C. § 112, ¶ 6:

Dell contends that the claims do not recite any structure for the “audio [coding/decoding] unit.” Opening at 23. Dell contends that the claims only describe the [coding/decoding] unit with respect to their function and location (*i.e.*, part of the “arithmetic [coding / decoding] apparatus”). *Id.* Based on that lack of structure, Dell contends that the claim term is subject to § 112, ¶ 6. *Id.*

In its response, VideoLabs contends that § 112, ¶ 6 does not apply because a POSITA would understand that this term refers to an audio encoder, which is known structure. Response at 17. In support of this argument, VideoLabs contends that ’059 Patent relates to “coding and decoding picture data.” *Id.* (citing ’059 Patent at 1:11–13). For example, VideoLabs contends that Figure 14 depicts that content is coded by an electronic device such as a computer, camera, or server. *Id.* at 17–18 (citing ’059 Patent at 18:22–28; Figure 14). VideoLabs contends that Figure 14 further shows that after the coded content is transmitted to a client (*e.g.*, computer, PDA, camera, cellular phone, *etc.*), the clients decode that content. *Id.* at 18 (citing ’059 Patent at 18:28–34). Based on that, VideoLabs contends that a POSITA would understand that an “audio coding unit” is an audio encoder, which is a well-known structure in the art at the time of the invention. *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 64–66).

VideoLabs contends that based on “volumes” of extrinsic evidence, including dictionary definitions, show that a POSITA would understand that an audio coder is hardware and/or software that “receives audio data and converts the data into an encoded form (*e.g.*, for transmission or

storage).” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶¶ 64–66). VideoLabs contends that Dell describes that some of its products include audio CODECs. *Id.*

VideoLabs contends that Dell fails to identify the qualifications for the POSITA, let alone how a POSITA would understand the term. *Id.* at 17. VideoLabs contends that Dell does not “discuss the term in the context of the claim or the intrinsic record[,]” but rather “argue[s]—with no citation to evidence and with no analysis—that the claim term does not recite structure.” *Id.*

In its reply, Dell contends that VideoLabs “attempts to back fill the lack of disclosure in the specification with expert testimony,” but VideoLabs’s argument fails for the same reason it failed for Term #1. Reply at 14. Dell contends that “audio coding” is generic and simply restates the claimed function. *Id.*

In its sur-reply, VideoLabs contends that Dell does not provide any evidence that a POSITA would not understand these terms to connote structure while, by contrast, VideoLabs provided “unrebutted evidence that these terms connote structure in the field of video encoding and decoding.” Sur-Reply at 10. VideoLabs contends that Dell describes that some of their products include audio CODECs. *Id.* As such, VideoLabs contends that that it would be obvious, even to a lay person, that “audio coding and decoding units and data reading units would be known structures in the field of video encoding and decoding because in most cases videos are comprised of audio and visual data that must be read in order to be shown to a viewer.” *Id.*

VideoLabs contends that Dell does not “analyze the terms from the prospective of a POSITA in view of the intrinsic record” nor do they rebut VideoLabs’s extrinsic evidence which describes these terms as structure. *Id.*

The Court’s Analysis:

After reviewing the parties’ arguments and considering the applicable law, the Court agrees with VideoLabs that the term is not subject to § 112, ¶ 6 for the reasons that follow. **First**, because the term does not contain the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348.

Second, the Court agrees with VideoLabs that “audio coding unit” (and “audio decoding unit”) describes audio encoders (and “audio decoders”), which are a very well-known class of structures. *Apple*, 757 F.3d at 1299, *rev’d on other grounds by Williamson*, 792 F.3d 1339 (“A limitation has sufficient structure when it recites a claim term with a structural definition that is either provided in the specification or generally known in the art.”).

The specification, using Figure 14 as an example, describes that the video content is coded by content supply system ex100, transmitted to the client via streaming server ex103, and decoded by the clients. ’059 Patent at 18:22–28. The Court agrees with VideoLabs that a POSITA would understand that the encoder (or decoder) described in this passage is the claimed audio encoder unit (or audio decoder unit).

VideoLabs also provides extrinsic evidence that supports its contention that “audio coding unit” (or “audio decoding unit”) is a very well-known class of structures. For example, VideoLab’s expert opines that a POSITA “would understand that this term refers to particular class of structures” and that “‘audio coding unit’ (or ‘audio decoding unit’) ‘is an audio encoder (or audio decoder). Response, Ex. 1 (Ricardson Declaration) at ¶¶ 64–66. An audio encoder is hardware and/or software that receives audio data and converts the data into an encoded form. Response, Ex. 1 at ¶¶ 64, 66. As a second example, technical dictionaries also describe that “encoder” is “any hardware or software that encodes information—that is, converts the information to a particular form or format.” Response, Ex. 1K at 192; *see also* Response, Ex. 1L at 27 (audio

processor), Response, Ex. 1M at 137 (decoder). As a third example, the ITU-T Recommendation G.723.1 standard provides a format for encoding/decoding, structural diagrams for an audio encoder/decoder, and sample code implementing the encoder/decoder. Response, Ex. 1E at ii, 3, 17, 22; Figures 1, 2; Section 5. Finally, a POSITA would understand that audio CODEC products refer to software and hardware to encode/decode audio data. Response, Exs. 1P, 1S, 1T. In fact, Dell states that some of its products include an audio CODEC device. Response, Ex. 1N.

By contrast, Dell fails to identify the qualifications for the POSITA, let alone how a POSITA would understand the term. Dell further does not provide any evidence or analysis why a POSITA would not understand that audio encoders/decoders refer to a very well-known class of structures. Furthermore, Dell does not rebut any of the extrinsic evidence that describes that audio CODECs are known structure.

Construction: Because the “heavy presumption” is that terms should be construed according to their plain-and-ordinary meaning and because Dell does not allege lexicography or disclaimer, which are the only two exceptions to the general rule that a term should be construed as having its plain-and-ordinary meaning, the Court concludes that the term should be construed as having its plain-and-ordinary meaning. *Azure Networks*, 771 F.3d at 1347; *Thorner*, 669 F.3d at 1365.

Therefore, for the reasons described above, the Court finds that the term is not subject to § 112, ¶ 6 and should be construed according to its plain-and-ordinary meaning.

D. Term #4: “to switch between the plurality of probability tables in a predetermined one direction within each block”

Term	VideoLabs's Proposed Construction	Dell's Proposed Construction
<p>#4: “to switch between the plurality of probability tables in a predetermined one direction within each block”</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p>	<p>“from a probability table with a smaller table number to a probability table with a larger table number (i.e., in ascending order of probability table numbers)”</p> <p>Alternative: “in either ascending or descending order of probability table numbers, but not both”</p>

The Parties' Positions:

Dell contends that the Court needs to resolve “(1) whether the ‘direction’ in which the invention switches between probability tables is defined by the numbers assigned to each of tables (i.e., what the specification refers to as ‘table numbers’), and (2) whether switching in ‘one direction’ means switching in an ascending order of these table numbers.” Opening at 3.

With respect to the first issue, Dell contends that the term needs to be construed because probability tables are abstract data structures without an “inherent location or relationship to each other,” so the Court should provide some reference point to define what the “direction” is in order to help the jury. *Id.*

Dell contends that the claim language describes switching in a “predetermined one direction” and also not switching in the “direction opposite to the predetermined one direction.” *Id.* at 4. Dell contends that “the ‘one direction’ of the ’059 patent must mean more than simply not re-using a probability table after switching to a new table. Otherwise, the requirement of not switching ‘in the direction opposite to the predetermined one direction’ would be rendered ‘mere surplusage.’” *Id.* (citing *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)).

Dell contends that the specification describes that every single embodiment of in the patent defines directionality by reference to table numbers. *Id.* at 5 (citing ’059 Patent at 6:20–30, 6:50–52, 7:61–8:3, Figures 7, 9). Dell contends that “this uniform disclosure of the patent is compelling evidence that the claims must be construed accordingly.” *Id.* (citing cases).

Dell contends that Applicant distinguished prior art “on the basis that it switched between context tables in *both directions* (*i.e.*, in both ascending and descending order of table numbers) while coding a single block, whereas the claims require switching in ‘one direction’ within a given block.” *Id.* at 6 (citing Opening, Ex. 3 (prosecution history of parent patent) at 9) (emphasis in Dell’s brief)). Dell contends that

[T]he context table numbers in [prior art reference] switch in both increasing *and* decreasing directions within a block (*e.g.*, 1 to 6 to 11 to 3 to 8 to 13), contrary to the claims. Thus, the applicant’s arguments distinguishing [prior art reference] confirm, first, that the applicant understood “direction” in the patent to be defined by table numbers, and, second, that the claims do not allow switching to a table of a lower number after using one of a higher number.

Id. at 7.

Dell contends that VideoLabs has not explained what “direction” means apart from numbers. *Id.* at 8. Rather, Dell contends that unless numbered, tables do not have an inherent order. *Id.*

With respect the second issue (whether switching in “one direction” means switching in an ascending order of these table numbers), Dell contends that the patentee acted as their own lexicographer; namely, by reciting “the probability tables are switched in *one direction, that is, from a probability table with a smaller table number to a probability table with a larger table number.*” *Id.* at 9 (quoting ’059 Patent at 6:50–52 (emphasis in original); citing ’059 Patent at 12:62–64). Dell contends that the patentee’s use of “that is” constitutes a definition for what follows. *Id.* (citing cases).

Dell contends that every embodiment describes that probability tables are switched in an ascending order. *Id.* at 10. Dell contends that this indicates that the claims should be limited to the disclosed embodiments. *Id.* Dell contends that VideoLabs “has not identified—and Dell is not aware—of any portion of the ’059 patent that suggests that the invention switches in a descending order of table numbers, or indeed any order other than ascending order.” *Id.*

Dell contends that ascending table numbers was a feature that Applicant used to distinguish the prior art from the claimed invention. *Id.* (citing cases). More specifically, Dell contends that the ’059 patent “contrasts the prior art approach with the allegedly inventive approach depicted in Figure 7, in which the probability table can either stay the same or increase to a probability table with a higher table number.” *Id.* at 11.

In its response, with respect to the probability table being limited to numbers, VideoLabs contends that it is not so limited, for the reasons described above with respect to Term #2. Response at 19.

With respect to Dell’s argument “predetermined one direction” is limited to ascending table numbers, VideoLabs contends that “‘direction’ is a plain English word with no specialized technical meaning.” *Id.* at 20 (citing Response, Ex. 1 (Richardson declaration) at ¶ 75). VideoLabs contends that “direction” “also naturally includes many contexts that are not numerically based, such as ‘up / down,’ ‘clockwise / counterclockwise,’ ‘left / right,’ ‘A to Z,’ etc.” *Id.* (citing Response, Ex. 1 (Richardson declaration) at ¶ 75).

VideoLabs contends that Dell does not allege disclaimer, but does allege lexicography. *Id.* VideoLabs contends that there is no lexicography because the alleged definitional signal—“that is”—does not satisfy “exacting” standard of lexicography. *Id.* (citing *Baxalta Inc. v. Genentech, Inc.*, 972 F.3d 1341, 1347 (Fed. Cir. 2020)).

VideoLabs contends that “that is” or “i.e.” “may signal lexicography in some rare circumstances, in others, it does not.” *Id.* at 21. VideoLabs contends that there is no lexicography in this case for multiple reasons. First, the alleged definitional statement was made with respect to an exemplary embodiment. *Id.* Furthermore, by using “[a]s described above,” VideoLabs contends that examining the entire sentence shows that the patentee was summarizing the explanation regarding the exemplary embodiment. *Id.* (quoting ’059 Patent at 6:50–52). As such, VideoLabs contends that there is no clear intent to define “direction.” *Id.*

Second, VideoLabs contends that the specification uses “that is” or “i.e.” in other places ‘to provide summary information of prior descriptions, not to signal lexicography.’ *Id.* at 21–22 (citing ’059 Patent at 8:49–57, 10:1–3, 10:12–13, 10:17–18, 16:10–11).

Third, VideoLabs contends that the patentee defined other terms and when they did, they did so unambiguously by using the word “hereinafter” and using quotation marks around the definition. *Id.* (citing ’059 Patent at 5:17–19, 5:19–22).

With respect to Dell’s prosecution history argument, VideoLabs contends that this argument is “irrelevant” because it relies on a parent patent’s application, which has different claim language. *Id.* at 23 (citing *ResQNet.com, Inc. v. Lansa, Inc.*, 346 F.3d 1374, 1383 (Fed. Cir. 2003)).

VideoLabs contends that had Applicant

[U]nderstood and intended the ‘direction’ to be limited to an ‘ascending order,’ they could have simply demonstrated that the context numbers decrease in number. However, the applicants made it clear that “direction” is not so limited by arguing that, in reference’s disclosure, the context numbers did not merely decrease, but instead switched in two different directions.

Id.

VideoLabs contends that Dell’s proposed construction improperly limits the claim scope to the disclosed embodiments. *Id.*

In its reply, Dell contends that VideoLabs “turns immediately to extrinsic evidence, but even it fails to support [its] arguments.” Reply at 2. With respect to VideoLabs’s argument that probability tables could include non-numerical values, Dell contends that those kinds of probability tables do not exist. *Id.*

With respect to Dell’s requirement that the probability tables must be numbered, Dell contends that VideoLabs does not point to anything in the intrinsic evidence that is inconsistent with this requirement. *Id.* Dell contends that, rather, VideoLabs uses extrinsic evidence to broaden the scope of the term. *Id.* at 2–3. Dell contends that it is inappropriate to use extrinsic evidence when the “intrinsic record already shows that “direction” in the ’059 patent is defined by table numbers.” *Id.* at 3 (citing *Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1287 (Fed. Cir. 2021)).

Even then, Dell contends that VideoLabs’s extrinsic evidence is “inapt.” *Id.* More specifically, while VideoLabs argues that “table directions could also be based on ‘up / down,’ ‘clockwise / counterclockwise,’ ‘left / right,’ ‘A to Z,’ etc.,” Dell contends that VideoLabs does not “provide[] a single example, *anywhere*, of probability tables that are not numbered.” *Id.* (emphasis in Dell’s brief). Dell contends that VideoLabs does not explain how tables in the memory of a computer could be stored in a “clockwise” manner, without being numbered. *Id.* Dell contends that even the alleged “probability tables” in the art that VideoLabs points to are “defined by numbered indices.” *Id.*

Dell contends that table numbers was a “key distinction” between the claimed invention and the prior art. *Id.* at 3. According to Dell, the table numbers in the prior art reference could switch in the following order: 1, 6, 11, 2, 7, 12, 3, 8, 13. *Id.* at 3–4 (citing U.S. Patent No. 6,856,701 at Fig. 7b). Dell contends that according to VideoLabs, this order “could be considered ‘one

direction’ because they system traversed the tables in one pathway without going back to prior tables.” *Id.* at 4. Dell contends that Applicant distinguished this prior art references on the basis that “‘the contexts are switched in both directions,’ and not ‘one direction,’ precisely because the system switched to lower table numbers after visiting higher ones, and *regardless of the fact that lower numbers were not visited before*.” *Id.* (emphasis in Dell’s brief). Dell contends that Applicant was only able to make this distinction based on referring to table numbers. *Id.*

With respect to switching in an ascending direction, Dell contends that the patentee acted as their own lexicographer for the reasons described in Dell’s Opening brief. *Id.*

Dell contends that one of the cases VideoLabs cites where the Federal Circuit did not find lexicography for a “i.e.” statement was because the specification contradicted the alleged definition in several places. *Id.* (citing *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1373–74 (Fed. Cir. 2005)). Dell contends that, by contrast, in this case, VideoLabs cannot point to a single sentence that is inconsistent with the alleged definition. *Id.* Dell contends that VideoLabs’s argument that the specification provides examples where the patentee acted as their own lexicographer is flawed because the alleged lexicography only provided an abbreviation for a term. *Id.* at 5 n.2.

With respect to VideoLabs’s argument that Dell is trying to limit the claim scope to an exemplary embodiment, Dell contends that those are the only embodiments. *Id.* Dell contends that VideoLabs does not rebut “clear Federal Circuit law that the uniform disclosure of every single embodiment is compelling evidence that the claims should be construed accordingly.” *Id.* (citing cases). Dell contends that “the ’059 patent emphasizes that ‘[t]his is the point that distinguishes the present invention from the existing technique.’” *Id.* (citing ’059 Patent at 6:56–57).

With respect to VideoLabs’s argument that the claim could cover descending orders, Dell contends that it agrees to the extent that the claim can cover “*either ascending or descending order of probability table numbers, but not both.*” *Id.* (emphasis in Dell’s brief).

In its sur-reply, VideoLabs contends that the plain-and-ordinary meaning of “direction” is not limited to “ascending order.” Sur-Reply at 11. With respect to lexicography, VideoLabs contends that because the alleged definitional statement is a summary of a single embodiment, the patentee did not “clearly express” the intent to redefine the term. *Id.*

VideoLabs contends that it provided multiple cases where courts found that “that is” or “i.e.” are not “automatically lexicographical.” *Id.* VideoLabs contends that Dell only attempts to rebut one of those cases, but that case still indicates that use of “i.e.” does not automatically trigger lexicography. *Id.* at 11–12.

With respect to Dell’s argument that the patentee did not act as their own lexicographer in other instances, VideoLabs contends that rather than providing an abbreviation, the patentee clearly defined the term. *Id.* at 12. More specifically, VideoLabs contends that the passage that shows that the patentee clearly intended to redefine the term:

Then, the RL sequence generation unit 201 generates a sequence (to be referred to as “RL sequence” hereinafter) made up of combinations of a number R indicating a run of “zero” coefficients and the subsequent coefficient value L indicating a non-“zero” coefficient (to be referred to as “RL values” hereinafter).

Id. at 12 (quoting ’059 Patent at 5:17–23).

VideoLabs contends that Dell’s alternative proposed construction (which includes either “ascending” or “descending” order, but not both) further indicates that the patentee did not act as their own lexicographer. *Id.*

VideoLabs contends that Dell’s proposed construction improperly attempts to limit the claim scope to an embodiment. *Id.* With respect to Dell’s argument that when all embodiments

contain a particular feature limits the claim scope, VideoLabs contends that “Federal Circuit has rejected [Dell’s] false characterization.” *Id.* (citing *Evolusion*, 22 F.4th at 1371). VideoLabs contends that the cases Dell cites are inapposite. *Id.* at 12–13.

With respect to Dell’s argument that VideoLabs has not identified any intrinsic evidence that is inconsistent with Dell’s proposed construction, VideoLabs contends that “consistency” is not the test. *Id.* at 13.

VideoLabs finally contends that it “provided numerous examples of directions falling outside [Dell’s] construction that mean more than just not revisiting tables.” *Id.* VideoLabs contends that yet another example, based on the intrinsic record, is that the patent discloses probability tables containing a probability of 0.1, 0.2, 0.4, and 0.7. *Id.* (citing ’059 Patent at 6:60–7:7). VideoLabs contends that the probability tables could be “switched from tables of lower probabilities to higher probabilities, which would not require a ‘table number’ or switching table numbers in an ‘ascending order.’” *Id.* at 13–14.

Based on this, VideoLabs contends that there is no need to limit scope of “direction.”

The Court’s Analysis:

The parties have two disputes: (1) whether tables must be numbered and (2) whether the tables must be switched in an “ascending” only (or “descending” only) manner. The first dispute is a rehash of the arguments in Term #2. Dell does not provide any new and/or sufficiently compelling arguments to change the Court’s decision regarding the first dispute.

With respect to the second argument, Dell’s argument primarily hinges on whether there is lexicography; in particular, whether the patentee acted as their own lexicographer based on the following statement “[a]s described above, the probability tables are switched in *one direction*,

that is, from a probability table with a smaller table number to a probability table with a larger table number.” ’059 Patent at 6:50–52, 12:62–64. The Court concludes that the patentee did not act as their own lexicographer for the reasons that follow.

First, the use of “that is” (or “i.e.”) is not automatically lexicographical. *Pfizer*, 429 F.3d at 1373 (holding that “saccharides (i.e., sugars)” is not a lexicographic statement, and that claims must be read in of the entire specification). By contrast, the patentee used “that is” or “i.e.” in other places in the specification summarize information, not to signal lexicography. *See, e.g.*, ’059 Patent at 8:49–57, 10:1–3, 10:12–13, 10:17–18, 16:10–11).

Second, both alleged lexicographical statement were made in reference to an embodiment; namely, the first statement (’059 Patent at 6:50–52) was made in reference to the “First Embodiment” (’059 Patent at 4:42) while the second statement (’059 Patent at 12:62–64) was made in reference to the “Second Embodiment” (’059 Patent at 11:5). Because these statements were made with respect to two specific embodiments, the Court cannot conclude that the patentee had the “clear intent” to define the term for all embodiments—including undisclosed ones—instead of just describing how specific embodiments worked.

Third, the “[a]s described above,” in the alleged definitional statement tends to indicate that the patentee did not intend to act as their own lexicographer for this term, but merely intended to summarize what was already explained above. *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning” and must “clearly express an intent to redefine the term.”).

Fourth, to the extent the patentee wanted to refine a term, they used “to be referred to ... hereinafter.” *See, e.g.*, ’059 Patent at 5:17–19, 5:19–22.

Because the standards for a finding of lexicography are “exacting,” the Court concludes that the patentee in this case did not act as their own lexicographer. *Hill-Rom Servs.*, 755 F.3d at 1371.

Therefore, for the reasons described above, the Court finds that the term should be construed according to its plain-and-ordinary meaning.

E. Term #5: “data reading unit configured to read the multiplexed data from said recording medium”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
<p>#5: “data reading unit configured to read the multiplexed data from said recording medium”</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6 the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are computer system (Cs or ex111), PDA (ex112), camera (ex116 or ex113), cellular phone (ex114 or 115), STB (ex407), recording/reproducing unit (ex307), LSI (ex117), and/or reproduction apparatus (ex403), and equivalents thereof.</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read the multiplexed data from said recording medium</p> <p>Structure: Indefinite</p>

The Parties’ Positions Regarding Whether the Term is Subject to 35 U.S.C. § 112, ¶ 6:

Dell contends that “unit” is a nonce word and that the claims “claims recite no structure whatsoever for the ‘data reading unit.’” Opening at 26.

In its response, VideoLabs contends that Dell again does not provide evidence or analysis that the claim does not recite structure. Response at 24. VideoLabs contends that “POSITA would

understand the term to connote structure; namely, a known class of hardware and software within a known environment that reads data from a recording medium or memory.” *Id.* VideoLabs contends that the specification describes that clients transmit media content over a network, which is stored in a recording medium or memory upon receipt so it can be processed further (*e.g.*, decoded). *Id.* at 24–25 (citing ’059 Patent at Figure 14; 17:35–18:38, 17:35–38). VideoLabs contends that “each of these types of client electronic devices includes known hardware and/or software that is used to read data stored from an internal or external recording media or memory,” including SD memory cards, CD or DVD storage. *Id.* at 25 (citing ’059 Patent at Figures 15, 17).

Based on the above, VideoLabs contends that the structure of this term is “hardware and/or software of the decoding apparatus that is configured to read multiplexed data from the recording medium or memory.” *Id.*

VideoLabs contends that the “claim itself provides significant indicia of the structural nature of this claim term by reciting how it interacts with other claimed structures to achieve the claim-recited objectives.” *Id.* at 26. More specifically, VideoLabs contends that Claim 1 “recites the objective of the decoding apparatus: to decode data recorded on a recording medium.” *Id.* VideoLabs contends that “[t]he claim then recites how the structures of the apparatus interact to achieve this objective. The data reading unit reads data from a recording medium or memory, a demultiplexing unit then processes the data to demultiplex it, and then the separated data is decoded.” *Id.*

In its reply, Dell consolidate its arguments for this term with Term #3. Reply at 14.

In its sur-reply, VideoLabs also consolidate their arguments for this term with Term #3. Sur-Reply at 10.

The Court’s Analysis:

After reviewing the parties’ arguments and considering the applicable law, the Court agrees with VideoLabs that the term is not subject to § 112, ¶ 6 for the reasons that follow. *First*, because the term does not contain the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348.

Second, the Court concludes that a POSITA would still understand that this term is part of a device that has an CODEC and receives media content over a network. ’059 Patent at Figure 14, 17:35–18:38. A POSITA would understand that, in order to save the data, *e.g.*, so it can be processed further, it needs to be stored and retrieved from memory. *See, e.g., id.* at 20:60–63. Dell does not respond to this argument.

Finally, because the parties incorporate their arguments from Term #3, the Court likewise incorporate its reasoning for Term #3 here.

Construction: Because the “heavy presumption” is that terms should be construed according to their plain-and-ordinary meaning and because Dell does not allege lexicography or disclaimer, which are the only two exceptions to the general rule that a term should be construed as having its plain-and-ordinary meaning, the Court concludes that the term should be construed as having its plain-and-ordinary meaning. *Azure Networks*, 771 F.3d at 1347; *Thorner*, 669 F.3d at 1365.

F. Term #6: “audio decoding unit configured to decode audio data”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
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<p>#6: “audio decoding unit configured to decode audio data”</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase is voice processing unit (ex305), and equivalents thereof</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: decode audio data</p> <p>Structure: Indefinite</p>
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The Parties’ Positions Regarding Whether the Term is Subject to 35 U.S.C. § 112, ¶ 6:

Dell argues that this term is subject § 112, ¶ 6 for the reasons that Term #3 (“audio coding unit configured to code an audio signal”) is subject to § 112, ¶ 6. *See* Opening at 23.

In its response, VideoLabs contends that the same reasons that Term #3 (“audio coding unit configured to code an audio signal”) is not subject to § 112, ¶ 6 also apply for this term. Response at 28. VideoLabs contends that a POSITA would understand that the “audio decoding unit” is an audio decoder, which was a well-known structure at the time of the invention. *Id.* (Response, Ex. 1 (Richardson declaration) at ¶ 69).

In its reply, Dell consolidate its arguments for this term with Terms #3 and #5. Reply at 14.

In its sur-reply, VideoLabs also consolidate their arguments for this term with Terms #3 and #5. Sur-Reply at 10.

The Court’s Analysis:

For the same reasons Terms #3 and #5 are not subject to § 112, ¶ 6, this term is not subject to § 112, ¶ 6.

G. Term #7: “receiving unit configured to receive multiplexed data obtained by multiplexing (i) coded picture data that is obtained by coding a moving picture and (ii) audio data that is obtained by coding an audio signal”

Term	VideoLabs’s Proposed Construction	Dell’s Proposed Construction
<p>#7: “receiving unit configured to receive multiplexed data obtained by multiplexing (i) coded picture data that is obtained by coding a moving picture and (ii) audio data that is obtained by coding an audio signal”</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are antenna (ex201, ex406, or ex411), modem circuit (ex306), LSI (ex117), STP (ex407), flexible disk drive, camera (ex 113 or ex116), computer (ex111), PDA (ex112), cellular phone (ex114 or ex115), car (ex412), car navigation system (ex413), and/or a transmit/receive circuit (ex301), and equivalents thereof</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: receive multiplexed data obtained by multiplexing (i) coded picture data that is obtained by coding a moving picture and (ii) audio data that is obtained by coding an audio signal</p> <p>Structure: antenna ex201 for transmitting/receiving radio waves to and from the base station ex110</p>

The Parties’ Positions Regarding Whether the Term is Subject to 35 U.S.C. § 112, ¶ 6:

Dell contends that the “receiving” modifier does not provide any structural bounds. Opening at 28. Dell contends that the specification does not use this term nor does VideoLabs demonstrate that “receiving unit” has known structure. *Id.* at 28–29. Dell contends that the fact that VideoLabs has identified “practically anything and everything in the specification as corresponding structure” indicates that the term does not have inherent structure. *Id.* at 29.

In its response, VideoLabs contends that POSITA would understand the term to refer to known structure—a receiver (receiving circuitry that receives data).” Response at 29.

VideoLabs contends that Dell’s argument is that this term is subject to § 112, ¶ 6 is because the structure is too broad. *Id.* VideoLabs contends that courts “routinely” reject this argument. *Id.* (citing *CA, Inc. v. Netflix, Inc.*, No. 2:21-CV-00080-JRG-RSP, 2021 WL 5323413, at *28 (E.D. Tex. Nov. 16, 2021)).

VideoLabs contends that the ’059 Patent “describes systems for receiving and sending data for encoding and decoding,” and that a POSITA would understand that the “receiving unit” is a receiver (*i.e.*, receiving circuitry that receives data), which was a well-known structure at the time of the invention. *Id.* VideoLabs contends that also dictionary definitions describe that a receiver is hardware and/or software of the decoding apparatus that receives data.

VideoLabs contends that “the claimed ‘receiving unit’ term of claim 2 is part of the decoding apparatus and cooperates with other structures of the apparatus to receive and decode data.” *Id.* (citing *Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-CV-00055-JRG-RSP, 2017 WL 2190103 (E.D. Tex. May 17, 2017)).

In its reply, with respect to VideoLabs’s argument that a POSITA would recognize a receiver is hardware and/or software of the decoding apparatus that receives data, Dell contends that the “identification of structure is not ‘sufficiently definite.’” Reply at 15 (citing *Williamson*, 792 F.3d at 1348). With respect to VideoLabs’s argument that the claim language’s recitation of structure connotes structure, Dell contends that “cooperation-based argument has been rejected by the Federal Circuit.” *Id.* (citing *Diebold Nixdorf*, 899 F.3d at 1301).

In its sur-reply, VideoLabs contends that Dell cites no evidence for how a POSITA would understand the term. Sur-Reply at 14. VideoLabs contends that it cited to the intrinsic and extrinsic evidence, and provided expert testimony. *Id.*

VideoLabs contends that Dell’s argument that “receiving” and “unit” does not provide any structural bounds is not a valid basis to overcome the presumption that § 112, ¶ 6. *Id.* With respect to the cooperation argument, VideoLabs contends that Dell only argues that “cooperation” is irrelevant, but do not discuss any of the cases VideoLabs cites. *Id.*

The Court’s Analysis:

After reviewing the parties’ arguments and considering the applicable law, the Court agrees with VideoLabs that the term is not subject to § 112, ¶ 6 for the reasons that follow. **First**, because the term does not contain the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348.

Second, the Court agrees with VideoLabs that a POSITA would understand the term “receiving unit” refers to known structure—a receiver, which is receiving circuitry that receives data. Response, Ex. 1 (Richardson Declaration) at ¶ 85; Response, Ex. 1R at 301. By contrast, Dell does not identify a POSITA, let alone provide an argument that a POSITA would not understand that the claim term connotes structure.

Third, Dell’s principal argument is that the structure is so broad that it is essentially a black box and thus is subject to § 112, ¶ 6. The Court disagrees as “[a] term, however, does not become non-structural simply because it is broad.” *CA*, No. 2-21-CV-00080-JRG-RSP, 2021 WL 5323413, at *28; *see also Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1119 (Fed. Cir. 2017) (“it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function”).

Construction: Because the “heavy presumption” is that terms should be construed according to their plain-and-ordinary meaning and because Dell does not allege lexicography or disclaimer, which are the only two exceptions to the general rule that a term should be construed as having its plain-and-ordinary meaning, the Court concludes that the term should be construed as having its plain-and-ordinary meaning. *Azure Networks*, 771 F.3d at 1347; *Thorner*, 669 F.3d at 1365.

IV. CONCLUSION

In conclusion, for the reasons described herein, the Court adopts the below constructions as its final constructions.

SIGNED this 26th day of October, 2023.

A handwritten signature in black ink, appearing to read "Derek T. Gilliland", is written over a horizontal line.

DEREK T. GILLILAND
UNITED STATES MAGISTRATE JUDGE

Term	VideoLabs's Proposed Construction	Dell's Proposed Construction	Court's Final Construction
<p>#1: "a unit configured to obtain the residual block image of the current block by performing inverse quantization and inverse orthogonal transformation on the coefficients corresponding to the residual block image of the current block"</p> <p>U.S. Patent No. 7,769,238, Claim 1</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are inverse quantizing unit 1405 and inverse orthogonal transforming unit 1406, and equivalents thereof</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: obtain the residual block image of the current block by performing inverse quantization and inverse orthogonal transformation on the coefficients corresponding to the residual block image of the current block</p> <p>Structure: Indefinite</p>	<p>Not subject to 35 U.S.C. § 112, ¶ 6. Plain-and-ordinary meaning.</p>
<p>#2: "probability table"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p>	<p>"numbered table containing a probability with which '0' occurs and/or a probability with which '1' occurs"</p>	<p>Plain-and-ordinary meaning wherein the plain-and-ordinary meaning is a "table of at least one probability that is not merely data from which probabilities can be derived"</p>

Term	VideoLabs's Proposed Construction	Dell's Proposed Construction	Court's Final Construction
<p>#3: "audio coding unit configured to code an audio signal"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase is voice processing unit (ex305) and equivalents thereof.</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: code an audio signal</p> <p>Structure: Indefinite</p>	<p>Not subject to 35 U.S.C. § 112, ¶ 6. Plain-and-ordinary meaning.</p>
<p>#4: "to switch between the plurality of probability tables in a predetermined one direction within each block"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p>	<p>"from a probability table with a smaller table number to a probability table with a larger table number (i.e., in ascending order of probability table numbers)"</p> <p>Alternative: "in either ascending or descending order of probability table numbers, but not both"</p>	<p>Plain-and-ordinary meaning.</p>

Term	VideoLabs's Proposed Construction	Dell's Proposed Construction	Court's Final Construction
<p>#5: "data reading unit configured to read the multiplexed data from said recording medium"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6 the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are computer system (Cs or ex111), PDA (ex112), camera (ex116 or ex113), cellular phone (ex114 or 115), STB (ex407), recording/reproducing unit (ex307), LSI (ex117), and/or reproduction apparatus (ex403), and equivalents thereof.</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read the multiplexed data from said recording medium</p> <p>Structure: Indefinite</p>	<p>Not subject to 35 U.S.C. § 112, ¶ 6. Plain-and-ordinary meaning.</p>
<p>#6: "audio decoding unit configured to decode audio data"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase is voice processing unit (ex305), and equivalents thereof</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: decode audio data</p> <p>Structure: Indefinite</p>	<p>Not subject to 35 U.S.C. § 112, ¶ 6. Plain-and-ordinary meaning.</p>

Term	VideoLabs's Proposed Construction	Dell's Proposed Construction	Court's Final Construction
<p>#7: "receiving unit configured to receive multiplexed data obtained by multiplexing (i) coded picture data that is obtained by coding a moving picture and (ii) audio data that is obtained by coding an audio signal"</p> <p>U.S. Patent No. 7,970,059, Claims 1–4</p> <p>Proposed by Dell</p>	<p>No construction necessary</p> <p>Alternatively, if found to be subject to 35 U.S.C. § 112, ¶ 6, the function is recited in the claim and the structure(s), act(s), or material(s) corresponding to this phrase are antenna (ex201, ex406, or ex411), modem circuit (ex306), LSI (ex117), STP (ex407), flexible disk drive, camera (ex 113 or ex116), computer (ex111), PDA (ex112), cellular phone (ex114 or ex115), car (ex412), car navigation system (ex413), and/or a transmit/receive circuit (ex301), and equivalents thereof</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: receive multiplexed data obtained by multiplexing (i) coded picture data that is obtained by coding a moving picture and (ii) audio data that is obtained by coding an audio signal</p> <p>Structure: antenna ex201 for transmitting/receiving radio waves to and from the base station ex110</p>	<p>Not subject to 35 U.S.C. § 112, ¶ 6. Plain-and-ordinary meaning.</p>